

What is claimed is:

1. A data retrieval device, comprising  
a rearrangement means for rearranging a first  
5 data group including a plurality of rule data arranged in  
an order of a first processing significance degree, in an  
order of a second processing significance degree; and  
an assignment means for assigning a new  
second data group rearranged in an order of said second  
10 processing significance degree by the rearrangement means,  
to a plurality of memory blocks successively in an order  
from smaller (larger) second processing significance  
degrees;  
wherein when storing data assigned by said  
15 assignment means to said memory blocks, data assigned to  
said each memory block is furthermore rearranged in an  
order of said first processing significance degree by  
said rearrangement means and stored.
- 20 2. A data retrieval device as set forth in claim  
1, comprising a storage data range indication register  
for indicating a range that includes data of at least one  
said memory block in an order of said second processing  
significance degree.

3. A data retrieval device as set forth in claim  
2, comprising:

a comparison specifying unit for comparing  
said storage data range indication register with input  
5 retrieval data and specifying a memory range including a  
memory block storing data to be compared with the input  
retrieval data based on the comparison result; and

a block controlling unit for activating at  
the time of retrieving a memory block storing said data  
10 to be compared from said plurality of memory blocks based  
on the specification result of said comparison specifying  
unit.

4. A data retrieval device as set forth in claim  
15 2, comprising:

a block specifying register for holding a  
combination of one or a plurality of memory blocks among  
said plurality of memory blocks by relating to reference  
numbers; and

20 a block controlling unit for activating said  
memory block in accordance with a value stored in said  
block specifying register.

5. A data retrieval device as set forth in claim  
25 4, comprising said storage data range indication register

corresponding to said reference numbers.

6. A data retrieval device as set forth in claim  
1, wherein said second processing significance degree  
5 includes a processing significance degree in accordance  
with a size of a value.

7. A data retrieval device as set forth in claim  
2, wherein said second processing significance degree  
10 includes a processing significance degree in accordance  
with a size of a value.

8. A data retrieval device as set forth in claim  
3, wherein said second processing significance degree  
15 includes a processing significance degree in accordance  
with a size of a value.

9. A data retrieval device as set forth in claim  
4, wherein said second processing significance degree  
20 includes a processing significance degree in accordance  
with a size of a value.

10. A data retrieval device as set forth in claim  
5, wherein said second processing significance degree  
25 includes a processing significance degree in accordance

with a size of a value.

11. A data retrieval device as set forth in claim 1, wherein

5           said plurality of memory blocks are composed of content addressable memories; and

          a retrieval controlling unit for performing content address retrieving based on said input retrieval data on one or a plurality of memory blocks determined in accordance with a range of said second processing  
10           significance degree of stored data, and outputting an address of said memory block hit by the content address retrieving is provided.

15           12. A data retrieval device as set forth in claim 2, wherein

          said plurality of memory blocks are composed of content addressable memories; and

          a retrieval controlling unit for performing  
20           content address retrieving based on said input retrieval data on one or a plurality of memory blocks determined in accordance with a range of said second processing significance degree of stored data, and outputting an address of said memory block hit by the content address  
25           retrieving is provided.

13. A data retrieval device as set forth in claim  
3, wherein

said plurality of memory blocks are composed  
5 of content addressable memories; and

a retrieval controlling unit for instructing  
to perform content address retrieving based on said input  
retrieval data on said activated memory block and  
outputting an address of said memory block hit by the  
10 content address retrieving is provided.

14. A data retrieval device as set forth in claim  
4, wherein

said plurality of memory blocks are composed  
15 of content addressable memories; and

a retrieval controlling unit for instructing  
to perform content address retrieving based on said input  
retrieval data on said activated memory block and  
outputting an address of said memory block hit by the  
20 content address retrieving is provided.

15. A data retrieval device as set forth in claim  
5, wherein

said plurality of memory blocks are composed  
25 of content addressable memories; and

a retrieval controlling unit for instructing to perform content address retrieving based on said input retrieval data on said activated memory block and outputting an address of said memory block hit by the  
5 content address retrieving is provided.

16. A data retrieval device as set forth in claim 6, wherein

said plurality of memory blocks are composed  
10 of content addressable memories; and

a retrieval controlling unit for instructing to perform to execute content address retrieving based on said input retrieval data on one or a plurality of memory blocks determined in accordance with a range of said  
15 second processing significance degree of stored data, and outputting an address of said memory block hit by the content address retrieving is provided.

17. A data retrieval device as set forth in claim  
20 7, wherein

said plurality of memory blocks are composed of content addressable memories; and

a retrieval controlling unit for instructing to perform content address retrieving based on said input  
25 retrieval data on one or a plurality of memory blocks

determined in accordance with a range of said second processing significance degree of stored data, and outputting an address of said memory block hit by the content address retrieving is provided.

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18. A data retrieval device as set forth in claim 8, wherein

said plurality of memory blocks are composed of content addressable memories; and

10 a retrieval controlling unit for instructing to perform content address retrieving based on said input retrieval data on said activated memory block, and outputting an address of said memory block hit by the content address retrieving is provided.

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19. A data retrieval device as set forth in claim 9, wherein

said plurality of memory blocks are composed of content addressable memories; and

20 a retrieval controlling unit for instructing to perform content address retrieving based on said input retrieval data on said activated memory block, and outputting an address of said memory block hit by the content address retrieving is provided.

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20. A data retrieval device as set forth in claim  
10, wherein

said plurality of memory blocks are composed  
of content addressable memories; and

5 a retrieval controlling unit for instructing  
to perform content address retrieving based on said input  
retrieval data on said activated memory block, and  
outputting an address of said memory block hit by the  
content address retrieving is provided.

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